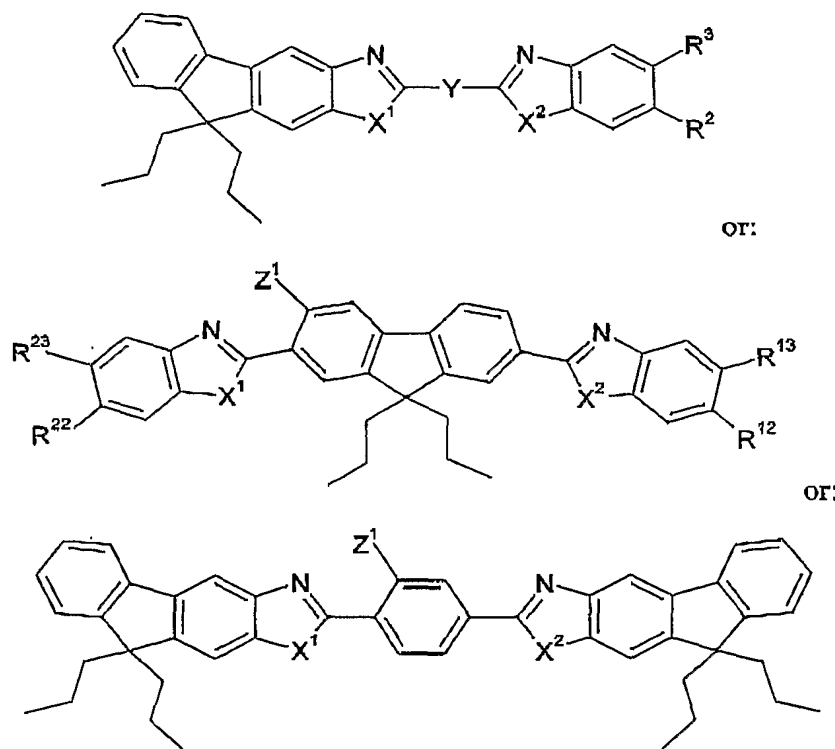


AMENDED CLAIMS

received by the International Bureau on 05 December 2006 (05.12.2006)

WHAT IS CLAIMED IS:

1. A compound having one of the following formulae:



wherein:

X^1 and X^2 are independently selected from NH, S or O;

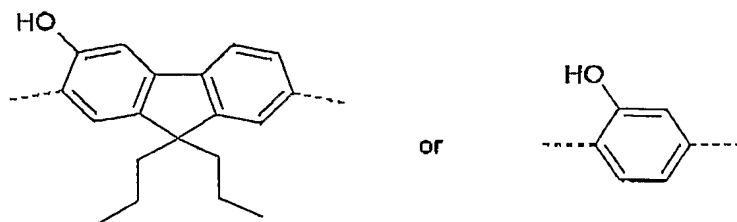
$-Z^1$ is -OH, -SH, a primary or secondary amine;

Y is an aromatic, carbocyclic or heterocyclic moiety substituted at least once with OH and optionally substituted with SH, primary, secondary or tertiary amine, nitro, nitroso, halogen, a substituted or unsubstituted, straight or branched C_{1-22} alkyl, C_{2-22} alkene, C_{2-22} alkyne, phenyl, C_{3-6} cycloalkyl;

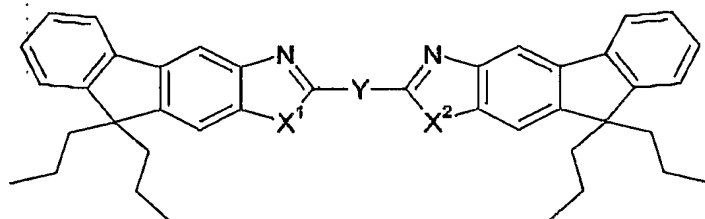
R^{22} , R^{23} , R^{12} and R^{13} are independently a substituted or unsubstituted, straight or branched C_{1-22} alkyl, C_{2-22} alkene, C_{2-22} alkyne, phenyl, C_{3-6} cycloalkyl, or at least one of the pairs R^{22} and R^{23} or R^{12} and R^{13} forms an aromatic or non-aromatic 1 to 3 ring cyclic moiety;

R^2 and R^3 are independently a substituted or unsubstituted, straight or branched C_{1-22} alkyl, C_{2-22} alkene, C_{2-22} alkyne, phenyl, C_{3-6} cycloalkyl, or together form an aromatic or non-aromatic 1 to 3 ring cyclic structure.

2. The compound of claim 1, wherein Y is chosen from:

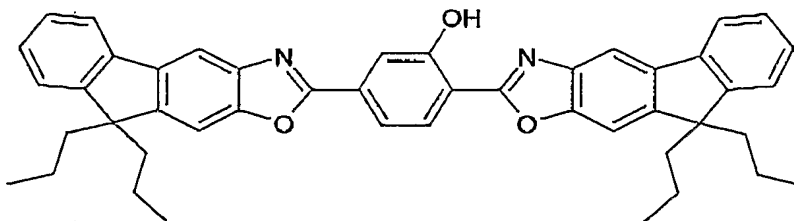


3. The compound of claim 1 or 2, wherein the compound has the formula:

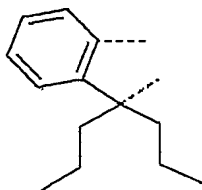


in which Y is an aromatic, carbocyclic or heterocyclic moiety substituted at least once with OH and optionally substituted with SH, primary, secondary or tertiary amine, nitro, nitroso, halogen, a substituted or unsubstituted, straight or branched C₁₋₂₂ alkyl, C₂₋₂₂ alkene, C₂₋₂₂ alkyne, phenyl, C₃₋₆ cycloalkyl, and X¹ and X² are independently selected from NH, S or O.

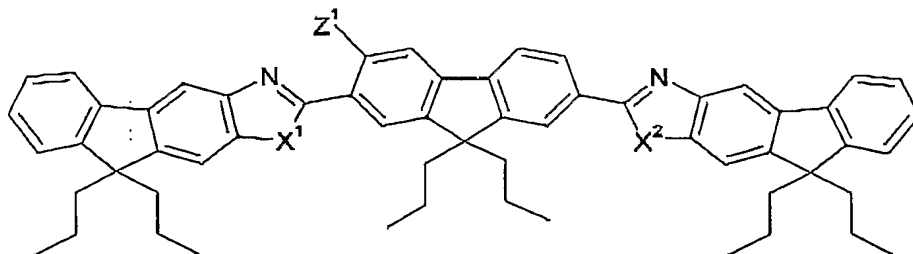
4. The compound according to claim 1, further defined as 1,4-bis(9,9-dipropyl -9H-fluoreno[3,2-d]oxazol-2-yl)-2-hydroxyphenyl of formula:



5. The compound according to claim 1, wherein at least one of the pairs R²² and R²³ or R¹² and R¹³ form:

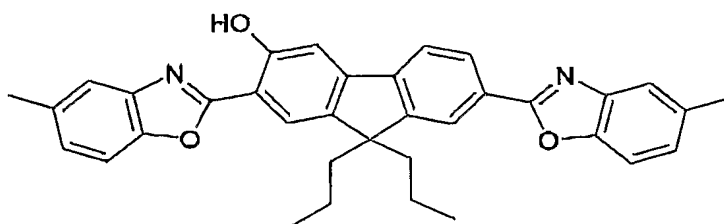


6. The compound according to claim 5, wherein the compound has the formula:

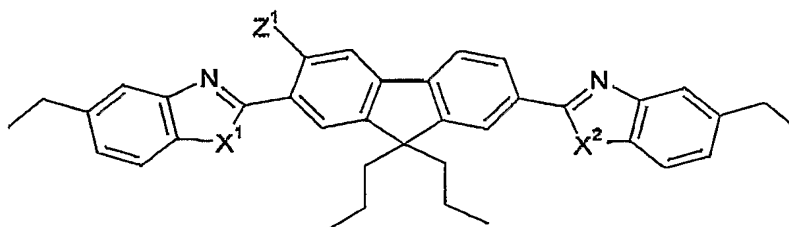


in which X^1 and X^2 are independently selected from NH, S or O, and $-Z^1$ is -OH, -SH, a primary or secondary amine.

7. The compound 2,7-bis(5-methylbenzoxazol-2-yl)-9,9-dipropyl-3-hydroxyfluorene of formula:



8. A compound having the formula:

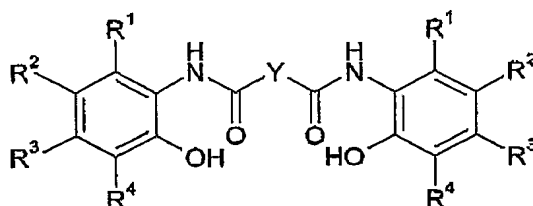


in which X^1 and X^2 are independently selected from NH, S or O, and $-Z^1$ is -OH, -SH, a primary or secondary amine.

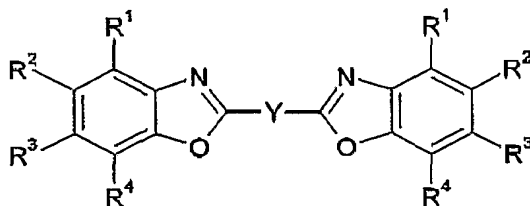
9. A polymer blend comprising a polymeric material and the compound according to any one of claims 1 to 7.
10. The polymer blend of claim 9, wherein said polymeric material is polycarbonate.
11. The polymer blend of claim 9, wherein said polymeric material is CR-39[®].
12. A method for manufacturing an optical lens, comprising molding the polymer blend according to any one of claims 9 to 11 into a desired shape to produce an optical lens.
13. The method of claim 12, wherein said molding step is injection molding.
14. An organic glass substrate having incorporated therein the compound according to any one of claims 1 to 7.
15. The organic glass substrate of claim 14, wherein the substrate is chosen from polycarbonates, the substrates obtained by polymerization of alkyl methacrylates, allyl

derivatives such as the allyl carbonates of linear or branched aliphatic or aromatic polyols, thio(meth)acrylics, thiourethanes, polyethoxylated aromatic (meth)acrylates such as the polyethoxylated bisphenolate dimethacrylates.

16. The organic glass substrate of claim 14, wherein the substrate is obtained by polymerization of ethylene glycol bis(allyl carbonate).
17. A method comprising the steps of preparing an intermediate compound of formula:



and reacting said compound under suitable conditions and with suitable reagents to form a compound of formula:



wherein:

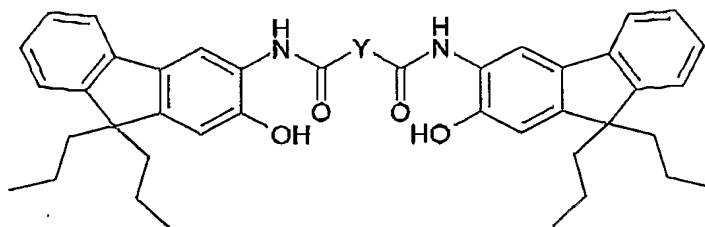
Y is an aromatic or nonaromatic cyclic structure optionally substituted at least once with OH, SH, H, C₁₋₂₂ alkyl, C₂₋₂₂ alkene, C₂₋₂₂ alkyne, primary, secondary or tertiary amine, amino, nitro, nitroso, halogen; and

R¹, R², R³ and R⁴ are independently selected from H, alkyl (C₁-C₈), alkoxy (C₁-C₈), acyl (-C(O)R; R = alkyl C₁-C₈), acetoxy (-OC(O)R; R = alkyl C₁-C₈), carboxylic acid and esters (-CO₂R = H or alkyl of C₁-C₈), amine (NR₂; R = H or alkyl C₁-C₈), nitro, nitroso, cyano, halogen (Cl, Br, I or F), substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, amide (-C(O)NR₂ R = H or alkyl C₁-C₈), or wherein:

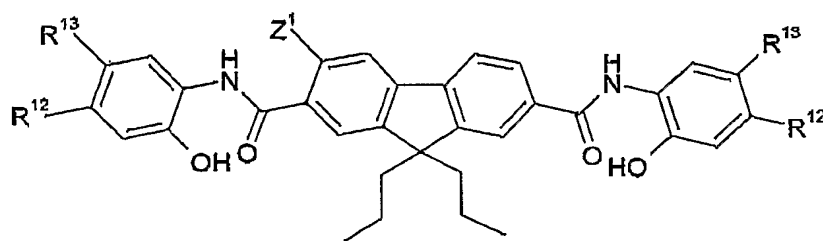
R¹ and R² or R² and R³ or R³ and R⁴ together form a carbocyclic ring, substituted or unsubstituted and fused carbocyclic ring, substituted or unsubstituted benzannulated carbocyclic and substituted or unsubstituted arylannulated carbocyclic; and R⁵, R⁶, R⁷ and R⁸ = H, alkyl (C₁-C₈), alkoxy (C₁-C₈), acyl (-C(O)R; R = alkyl C₁-C₈), acetoxy (-OC(O)R; R = alkyl C₁-C₈), carboxylic acid and esters (-CO₂R = H or alkyl of C₁-C₈), amine (NR₂; R = H or alkyl C₁-C₈), nitro, nitroso, cyano, halogen (Cl, Br, I or F), substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, amide (-C(O)NR₂ R = H or alkyl C₁-C₈), substituted

or unsubstituted heterocyclic, substituted or unsubstituted benzannulated heterocyclic and substituted or unsubstituted arylannulated heterocyclic.

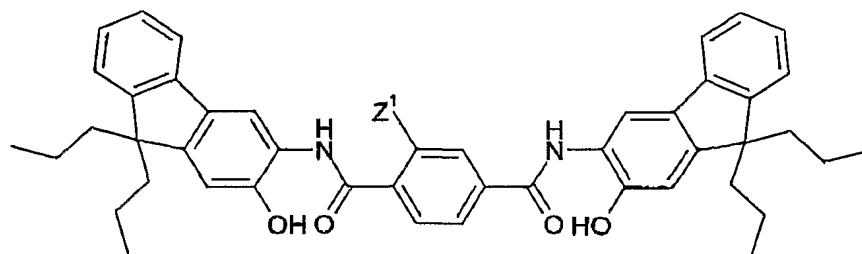
18. The method of claim 17, comprising the steps of preparing an intermediate compound of formula:



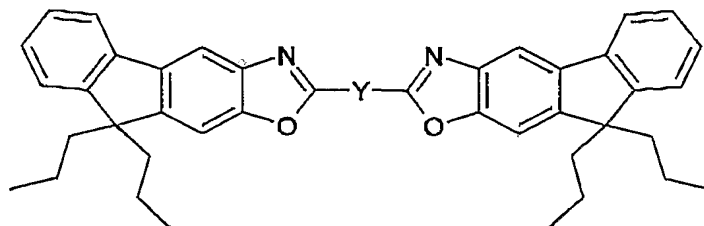
or:



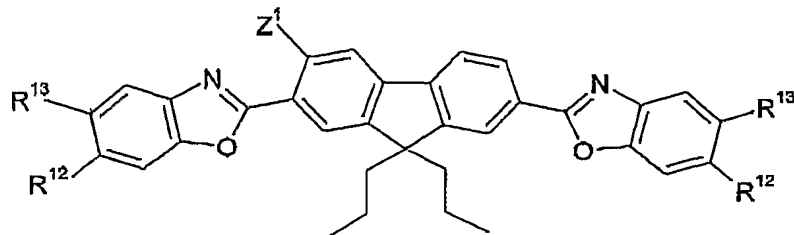
or:



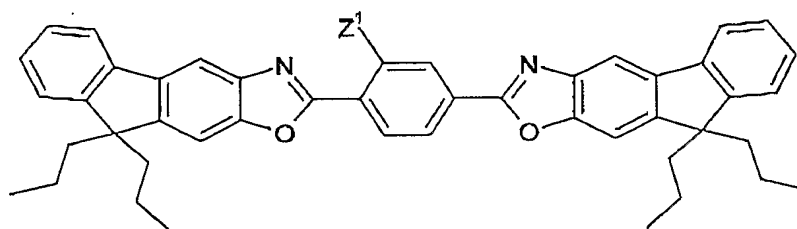
and reacting said compound under suitable conditions and with suitable reagents to form, respectively, a compound of formula:



or:



or:



wherein:

$-Z^1$ is $-OH$, $-SH$, a primary or secondary amine;

Y is an aromatic, carbocyclic or heterocyclic moiety substituted at least once with OH and optionally substituted with SH, primary, secondary or tertiary amine, nitro, nitroso, halogen, a substituted or unsubstituted, straight or branched C_{1-22} alkyl, C_{2-22} alkene, C_{2-22} alkyne, phenyl, C_{3-6} cycloalkyl;

R^{12} and R^{13} are independently a substituted or unsubstituted, straight or branched C_{1-22} alkyl, C_{2-22} alkene, C_{2-22} alkyne, phenyl, C_{3-6} cycloalkyl, or together form an aromatic or non-aromatic 1 to 3 ring cyclic moiety.

19. The method of claim 18 or 18, wherein Y is chosen from:

